

Appl. No. 10/081,891

IN THE CLAIMS

1. (Currently Amended) A circuit arrangement (~~15~~) for generating at least one voltage value (~~V_{mult}~~), which circuit arrangement includes a subvoltage generating unit (~~40~~) and a voltage multiplier (~~20~~), it being arranged to switch the voltage multiplier to a direct mode in order to control the voltage multiplier during a start time (~~t_s~~).
2. (Currently Amended) The A circuit arrangement as claimed in claim 1, characterized in that it is arranged to supply the voltage multiplier with an activation signal (~~32~~) formed from a subvoltage (~~V_{dae}~~) generated by the subvoltage generating unit and from a reference signal (~~V_{ref}~~), and that it is arranged to supply the voltage multiplier with an initial start signal (~~36~~) formed from the activation signal (~~32~~) during the start time (~~t_s~~).
3. (Currently Amended) The A circuit arrangement as claimed in claim 1, characterized in that there is provided a start control unit controlling the voltage multiplier, which start control unit includes at least one comparator (~~34~~) and a logic unit (~~35~~), the comparator being arranged to compare a subvoltage (~~V_{dae}~~) generated by the subvoltage generating unit and a reference voltage (~~V_{ref}~~), and to generate the activation signal (~~32~~), the logic unit (~~35~~) generating an initial start signal (~~36~~) so as to switch the voltage multiplier to a direct mode.
4. (Currently Amended) The A circuit arrangement as claimed in claim 1, characterized in that the start time (~~t_s~~) during which the voltage multiplier (~~20~~) operates in a direct mod is adaptive adjustable.

Appl. No. 10/081,891

5. (Currently Amended) The A circuit arrangement as claimed in claim 1, characterized in that a series connection of switching devices (SW_n) of the stages (S_n) in the voltage multiplier (20) is closed in the direct mode, and that the capacitors ~~capacitances~~ (CS_n) associated with the stages can be disconnected.

6. (Currently Amended) A circuit arrangement for driving a display device, comprising which arrangement includes a subvoltage generating unit (40) and a voltage multiplier (20), it being arranged to control the voltage multiplier (20) by switching the voltage multiplier to a direct mode by means of an initial start signal (36) during a start time (t_s).

7. (Currently Amended) A voltage Voltage multiplier (20) for generating at least one voltage value (V_{mult}), comprising containing a series connection of the a first plurality of stages (S_n) with first switching devices (SW_n), second switching devices (SC_n) and capacitors ~~capacitances~~ (CS_n), characterized in that during a start time ~~starttime~~ (t_s) the first switching devices (SW_n) are closed and by that a supply voltage (v_{dd}) at the a first input of the voltage multiplier is switched to the an output of the voltage multiplier.

8. (Currently Amended) A display unit (2) for the display of image data, which display unit includes an arrangement (15) for driving the display unit with a subvoltage generating unit (40) and a voltage multiplier (20), it being arranged to switch the voltage multiplier to a direct mode by means of at least one signal (36) during a start time t_s .

Appl. No. 10/081,891

9. (Currently Amended) An electronic apparatus which is provided with a display unit (2) for the display of image data and also with an arrangement (15) for driving the display unit, which arrangement includes a subvoltage generating unit (40) and a voltage multiplier (20), it being arranged that at least one signal (36) controls the voltage multiplier and that the voltage multiplier can be switched to a direct mode during a start time t_s .

10. (Currently Amended) A method of starting a circuit arrangement (15) which includes a subvoltage generating unit (40) and a voltage multiplier (20), in which method a **first** subvoltage value (V_{teil}) and a reference voltage (V_{ref}) are compared so as to generate an activation signal (32), the voltage multiplier (20) being switched to a direct mode during a start time (t_s) which is adaptively adjusted by monitoring an activation signal (32).

11. (New) The circuit arrangement of Claim 1, wherein the subvoltage generating unit comprises:

a plurality of intermediate nodes, each intermediate node formed by a series connection of a pair of resistors, and

a plurality of switches, each switch coupled to one of the plurality of intermediate nodes.

12. (New) The circuit arrangement of Claim 11, wherein the plurality of switches comprises a plurality of transistors.

Appl. No. 10/081,891

13. (New) The circuit arrangement of Claim 11, further comprising:

a first comparator coupled to the plurality of switches; and

a reference voltage source coupled to provide a reference voltage to the first comparator.

14. (New) The circuit arrangement of Claim 13, wherein the reference voltage source is a band gap circuit.

15. (New) The circuit arrangement of Claim 13, further comprising:

a second comparator coupled to the plurality of switches, and further coupled to the reference voltage source; and

a logic circuit coupled to receive an output signal from each of the first and second comparators;

wherein the first comparator and the second comparator receive different subvoltages from the plurality of switches.

16. (New) The method of Claim 10, further comprising producing the reference voltage as an output of a band gap circuit.

17. (New) The method of Claim 16, wherein the subvoltage generating unit produces a plurality of subvoltages; and further comprising selecting the first subvoltage value by means of a switching device.

Appl. No. 10/081,891

18. (New) The method of Claim 17, further comprising selecting a second subvoltage by means of the switching device and concurrently providing the first subvoltage to a first comparator and the second subvoltage to a second comparator.